

ABSTRACT

A pulse offset calibration method for a pulse-echo level measurement system. The pulse-echo level measurement system includes a transducer for transmitting calibration acoustic pulses and receiving echo pulses. A receiver
5 converts the echo pulses into corresponding pulse profile signals having a leading edge. A static delay interval is defined on the leading edge corresponding to the time interval between the reception of the echo pulse and the response by the receiver. A dynamic delay interval is defined on the leading edge corresponding to the time response characteristics of the transducer and the
10 receiver. The static delay interval and the dynamic delay interval are summed to determine the offset time interval for the echo pulse. The offset time interval is subtracted from the measurements to provide the true duration for the time of flight.